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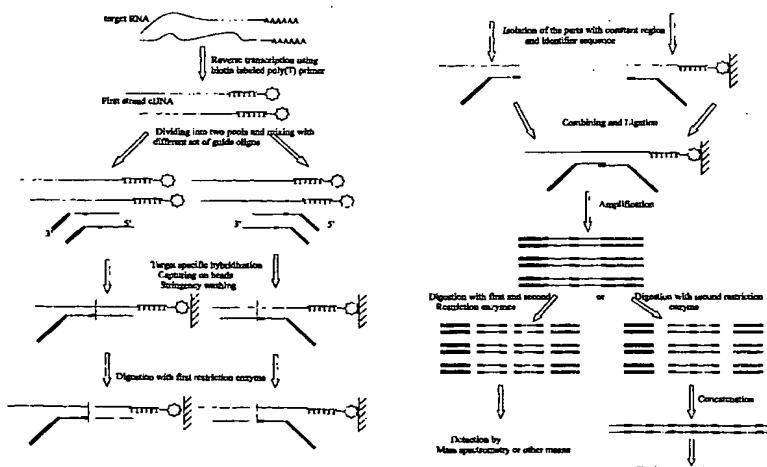
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(54) Title: OLIGONUCLEOTIDE GUIDED ANALYSIS OF GENE EXPRESSION



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(57) Abstract: The present invention relates to methods and compositions for simultaneously analyzing multiple different polynucleotides of a nucleic acid sample. The subject methods and compositions may also be applied to analyze or identify single polynucleotide; however, the subject methods and compositions are particularly useful for analyzing large diverse populations of polynucleotides. Methods of the invention involve hybridizing guide oligonucleotides to target polynucleotides for analysis, subsequently digesting double-stranded or partially double-stranded guide oligonucleotide intermediates, and isolating and analyzing digested part. The guide oligonucleotide is marked in identifier sequence and constant region so as to facilitate the simultaneous testing of multiple target polynucleotides. The identity or expression of a particular polynucleotide of interest may be ascertained by producing and quantifying a short identifier sequence derived from combining guide oligonucleotides and target polynucleotides.